HISTORY OF THE TAIPAN OXYURANUS SCUTELLATUS - WITH TWO NEW DISTRIBUTION RECORDS

by Graeme Gow

The Taipan has the respect of all herpetologists, whether amateur or professional.

In any discussion about Australian elapids, this snake is regarded as the ultimate species to collect. It is renowned for its speed, strength and ferocity when provoked.

The Taipan has been known to science since 1867 when Peters, a German professor, named it *Pseudechis scutellatus*, thus placing it in the same genus with the Black snakes.

In 1923, J.R. Kinghorn, then Curator of Reptiles at the Australian Museum, removed it from *Pseudechis* and created for it a new genus *Oxyuranus*. Its common name was bestowed upon it by Dr. Donald Thompson who first heard it called "Taipan" by the aboriginals of Cape York Peninsula. Eric Worrell in Song of the Snake (Angus and Robertson 1958) further justifies its vernacular name by stating that "Taipan" in Malayan means "person of high authority".

For many years the Taipan was regarded by the layman as just another brown snake and even today, throughout its distribution, it is still confused with the King Brown Snake *Pseudechis australis*, figure 2, and the Common Brown Snake *Pseudonaja textilis*, figure 3.

In 1950 it was responsible for the death of amateur herpetologist Kevin Budden at Cairns. This tragedy made headlines Australia-wide and resulted in the name Taipan becoming well known to Australians as our most dangerous snake.

In the early 1950's the only antivenene available was Tiger snake antivenene and this was used to treat the bites of all species. Tests on the toxicity of Taipan venom were conducted initially by Dr. C.H. Kellaway. Further research by Dr. Morgan and Dr. Graydon of the Commonwealth Serum Laboratories was carried out on fresh venom supplied by David Fleay, Eric Worrell. Ken Slater and Ram Chandra.

These combined efforts resulted in the production of a specific Taipan antivenine being produced in 1955.

Press reports over the next two decades plus greatly exaggerated accounts of personal encounters by people who do not understand snakes, have resulted in the Taipan receiving an undeserved reputation. Cane farmers often credit it with feats beyond the realms of possibility. These include overtaking a galloping horse and being able to strike so high that on occasions they have had to leap from their tractors to avoid being bitten. Of course herpetologists who have encountered, collected or kept this species, know only too well its true capabilities.

In its natural state, the Taipan is mainly diurnal in habit, being most active during early morning and late afternoon. It does however, become semi-nocturnal during warm weather. In sugar cane country, it usually lives in "wind rows", which, besides providing a good supply of mice, rats and bandicoots, afford suitable cover. It may also be found in and around groups of rocks, or under sheet iron and timber on the ground. I have never found it aggressive in the wild or in captivity unless provoked. All specimens I have collected have allowed

me to approach close to them, and without exception, have tried first to escape. If grasped by the tail, pinned or otherwise provoked, it attacks immediately, delivering a series of lightening-fast strikes.

When tail-held, the customary way in which Australian herpetologists catch snakes, it becomes distraught, and owing to its agility, can fling itself above a man's head. Its capture, even for an expert, should not be attempted without an assistant. The safest method is to pin the specimen as quickly as possible, but even that in itself is often a dangerous and difficult task. In captivity, this highly-strung species requires a warm dry cage with a temperature between 23-29 C.

A hide box or suitable hollow log should be provided as a retreat. Alternatively, a good depth of dry leaves assists this nervous snake to retire from view.

I have found that the Taipan is easy to work with compared to some of our other dangerous elapids, provided the handler is competent. The safest method of removing it from its cage for cleaning purposes, is by using two strong wire hooks about a metre in length. These can be slowly and carefully placed under the snake's body until a perfect point of balance is found. It can then be lifted slowly off the ground, out of the cage or into a deep bag held by another person. This method does not usually upset the snake - as invariably any other form of handling does.

The distribution of this species has always been a controversial topic among herpetologists, bushman and the general public. Northern Territorians have for years argued the presence of this snake in the top end. First evidence was thought to be two specimens recorded from near Oenpelli by the American Australian Scientific Expedition to Arnhem Land in 1948.

Although not recorded again in Arnhem Land until 1973 when J. Wombey (C.S.I.R.O.

Wildlife Research) collected a further specimen at Nourlangie, specimens were recorded from Melville and Bathurst Islands. Its apparent absence from the top end was puzzling to all, Eric Worrell collected snakes for ten years all over the Territory without sighting a single specimen. The author has spent the past seven years searching for the Taipan with the same frustrating results.

Although recorded in the literature from Birdum, south of Larrimah, N.T. (Worrell), a recent search of Australian collections revealed a single specimen in the Queensland Museum, collected in 1925 from Koolpinya station near Darwin. Its presence in the top end was definitely confirmed in July of this year by Mr Ray Petherick, who collected a 2 metre specimen from the Finnis escarpment. Mr Petherick, an experienced naturalist, has lived in this area for 30 years and in this period has sighted six specimens, indicating that it is far from common.

Its distribution has now been further extended to include the Kimberleys, W.A. The Western Australian Museum recently collected two specimens from the Mitchell Plateau (L.M. Smith pers. communication). This confirmed Worrell's prediction that the range of the Taipan should include northwestern Australia (Reptiles of Australia 1963).

GENERAL DESCRIPTION

The Taipan can be easily recognised by its large, long head (which is distinct from the nect) and the slender forebody.

The dorsal colouration is usually brassy to dark brown (occasionally almost black); ventral surface is yellow, spotted with orange.

Its average length is 2 metres, and the average maximum is 2.6 metres. It has been recorded at 3.6 metres. The largest speciment I have recorded measured 2.8 metres; this specimen was captured by Joe Bredl jnr., at Tully, north Queensland in 1966.

SCALATION

The mid-body scales are in 21-23 rows (faintly ridged), ventrals 220-250, subcaudals 45-80 divided, anal single.

REPRODUCTION

The Taipan is oviparous, producing 13-20 eggs in an average clutch which measure 52 x 30 mm and have an average weight of 21 - 24 grams. The incubation period in one instance was 70 days and the average total length of hatchlings was 381 millimetres.

DISTRIBUTION

Coastal Queensland from south of Brisbane to Cape York, the top end of the Northern Territory (including Melville and Bathurst Islands) to the Kimberleys, W.A.

A subspecies, Oxyuranus s. canni is found in the southern coastal lowlands of New Guinea. The colouration of this race, is steel-grey to black, with a reddish vertebral stripe. It has similar habits to the mainland form, but is less excitable.

The Taipan has large fangs which may measure up to 10mm in length, and a large quantity of extremely potent venom may be injected at a bite. Eric Worrell records an average yield of 100mg, but has taken up to 400mg at a single milking.

The properties of the venom are highly neurotoxic and before the advent of a specific antivenene all but two recorded cases of Taipan bite proved fatal.

The Commonwealth Serum Laboratories state that in the case of a bite, where the snake responsible has been positively identified as a Taipan, specific (monovalent) Taipan antivenene should always be administered in preference to polyvalent antivenene.

The Taipan has always been regarded as Australia's deadliest snake. However, in recent years the Small-scaled snake *Parademansia microlepidota*, a species described by McCoy in 1897 was rediscovered in the

channel country of western Queensland. This snake was confused for many years with the Taipan. Tests on the toxicity of its venom have been recently conducted by C.S.L. and these have shown this snake to be far the world's deadliest

It is a specialised, black soil plains dweller and I feel it is only a matter of time before it will be recorded from the Northern Territory.

REFERENCES

COGGER, H.G. 1975 Reptiles and Amphibians of Australia (A.H. and A.W. Reed Pty Ltd, Sydney.)

COVACEVITCH, 1970 The Snakes of Brisoane, J. revised edition. Queensland Museum.

COVACEVITCH, 1976 Recognition of Para-J. & WOMBEY, J. demansia microlepidota (McCoy) (Elapidae), A dangerous Australian snake, Proc. Roy, Soc. Qld, 87:29.

GOW, G.F. 1973 Notes on the Taipan
(Oxyuranus scutellatus) Royal
Zoological Society of N.S.W.
Bulletin of Herpetology. Vol. 1,
no. 2, P. 18-19

GOW, G.F. 1976 Snakes of Australia (Angus and Robertson, Sydney).

KINGHORN, 1956 Snakes of Australia (Angus and Robertson, Sydney).

McCOY, F. 1879 Zoology of Victoria.

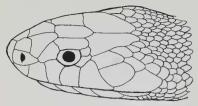
Decade III, Reptiles

SLATER, K.R. 1956 A guide to the Dangerous Snakes of Papua. Administration of Papua, Port Moresby.

SUTHERLAND, Australia's potentially most venomous snake: *Parade-*A.J., TANNER *mansia microlepidotus*. Med.
C. & J. Australia 1978 1:288-289
COVACEVITCH.J.

17

Fig. 1.



Oxyuranus scutellatus TAIPAN

Fig. 2.

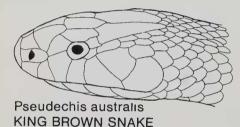
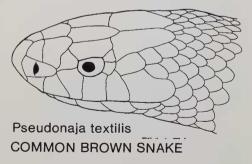
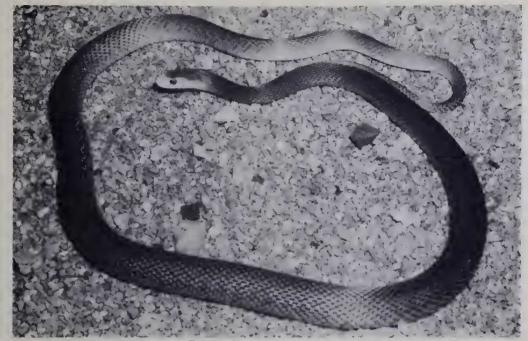


Fig. 3.







Taipan Oxyuranus scutellatus